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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,997	07/18/2003	Noriaki Sakamoto	10417-072002	3046
26211	7590	08/09/2005	EXAMINER	
FISH & RICHARDSON P.C. CITIGROUP CENTER 52ND FLOOR 153 EAST 53RD STREET NEW YORK, NY 10022-4611			ROSE, KIESHA L	
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/622,997	Applicant(s) SAKAMOTO ET AL. 	
	Examiner Kiesha L. Rose	Art Unit 2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-26 and 34-36 is/are allowed.
- 6) ☒ Claim(s) 27-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed 18 April 2005.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Takaya et al. (U.S. Patent 5,428,885).

Takaya discloses a hybrid circuit (Fig. 4) that contains a mounting board (printed circuit board) on which a plurality of patterns (19) are formed via an insulating layer (18), one or more semiconductor device (2) disposed on the mounting board, each of the semiconductor devices comprises at least one conductive path (10) and a semiconductor element (2) (on left) electrically connected to the conductive path, wherein the conductive path and the semiconductor element are sealed by an insulating resin (34) and an insulating film (18) (solder resist) selectively formed on a rear surface of the conductive path such that the conductive pattern located at a top part of the mounting board is insulated from the conductive path, the conductive path sealed by the insulating film intersects with the conductive pattern which is located at the top part of the mounting board, where an active element (2) (on right) is connected to the

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conductive path by a metal wiring (12) and the semiconductor device is mounted on the mounting board such that conductive pattern is connected to the conductive path.

In regards to claim 33, a plurality of conductive patterns (19) on a mounting board via an insulating layer (18), forming an insulating film (18) on a rear surface of a semiconductor device (2) (on the left) which is sealed by an insulating resin (34) and includes a conductive path (10) exposed at one surface of the insulating resin so as to selectively cover the conductive path and mounting the semiconductor device on the mounting board such that the insulating layer insulates the conductive path from at least some of the conductive patterns.

Allowable Subject Matter

Claims 21-26 and 34-36 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 21-26 and 34-36 are allowable because prior does not show alone or in combination along with the limitations of the independent claim such as a hybrid integrated circuit disposed on a mounting board and incorporating at least one conductive path, an active element and a passive element electrically connected to the conductive path wherein the conductive path, active element and passive element are sealed by an insulating element, wherein a rear surface of one conductive path is exposed at a surface of the insulating resin.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiesha L. Rose whose telephone number is 571-272-1844. The examiner can normally be reached on M-F 8:30-6:00 off 2nd Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Michael Trinh
Primary Examiner

Act SPE